

This document gives pertinent information concerning the issuance of the VPDES Permit listed below. This permit is being processed as a **Minor, Industrial** permit. The discharge results from the operation of a 6 MGD potable water treatment plant. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9VAC25-260-00 et seq.

1. Facility Name and Mailing Address: Rocky Pen Run WTF
P.O. Box 339
Stafford, VA 22555
SIC Code : 4941 WTP
Facility Location: 500 Greenbank Road
Fredericksburg, VA 22406
County: Stafford
Facility Contact Name: Mr. Harry L. Critzer
Telephone Number: 540-658-8630
2. Permit No.: VA0092568
Expiration Date of previous permit: N/A (Issuance)
Other VPDES Permits associated with this facility: N/A
Other Permits associated with this facility: N/A
E2/E3/E4 Status: N/A
3. Owner Name: Stafford County Board of Supervisors
Owner Contact/Title: Mr. Anthony Romanello /
County Administrator
Telephone Number: 540-658-8603
4. Application Complete Date: March 15, 2010
Permit Drafted By: Susan Mackert
Date Drafted: June 15, 2010
Draft Permit Reviewed By: Alison Thompson
Date Reviewed: July 12, 2010
Public Comment Period : Start Date: September 2, 2010
End Date: October 1, 2010
5. Receiving Waters Information: See Attachment 1 for the Flow Frequency Determination
Receiving Stream Name : Rocky Pen Run
Stream Code: 3-RPR
Drainage Area at Outfall: 5.2 square miles
River Mile: 0.61
Stream Basin: Rappahannock River
Subbasin: Rappahannock River
Section: 3a
Stream Class: III
Special Standards: PWS
Waterbody ID: VAN-E19R
7Q10 Low Flow: 0 MGD
7Q10 High Flow: 0 MGD
1Q10 Low Flow: 0 MGD
1Q10 High Flow: 0 MGD
Harmonic Mean Flow: 0 MGD
30Q5 Flow: 0 MGD
303(d) Listed: Receiving Stream - No
30Q10 Flow: 0 MGD
303(d) Listed: Downstream - Yes
TMDL Approved: Receiving Stream - No
Date TMDL Approved: N/A
TMDL Approved: Downstream - Yes
Date TMDL Approved: May 5, 2008 (bacteria)
6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

<u>✓</u> State Water Control Law	<u> </u> EPA Guidelines
<u>✓</u> Clean Water Act	<u>✓</u> Water Quality Standards
<u>✓</u> VPDES Permit Regulation	<u>✓</u> Other (9VAC25-860-10 et seq.)
<u>✓</u> EPA NPDES Regulation	

7. Licensed Operator Requirements: N/A

8. Reliability Class: N/A

9. Permit Characterization:

<input type="checkbox"/> Private	<input checked="" type="checkbox"/> Effluent Limited	<input type="checkbox"/> Possible Interstate Effect
<input type="checkbox"/> Federal	<input checked="" type="checkbox"/> Water Quality Limited	<input type="checkbox"/> Compliance Schedule Required
<input type="checkbox"/> State	<input checked="" type="checkbox"/> Toxics Monitoring Program Required	<input type="checkbox"/> Interim Limits in Permit
<input checked="" type="checkbox"/> PWTP	<input type="checkbox"/> Pretreatment Program Required	<input type="checkbox"/> Interim Limits in Other Document
<input type="checkbox"/> TMDL		

10. Wastewater Sources and Treatment Description:

Potable Water Production

This facility is not yet constructed. Stafford County proposes to withdraw water from the Rocky Pen Reservoir as the raw water source for the Rocky Pen Run Water Treatment Plant. The permitted production for the water treatment plant is 6 Million Gallons per Day (MGD).

The proposed system will be a membrane facility.

Wastewater Sources and Treatment

The industrial solids generated at this proposed water treatment facility will be processed in a centrifuge and then transported to the Rappahannock Regional Solid Waste Management Board Landfill (VAR051413) in Stafford.

See Attachment 2 for the NPDES Permit Rating Worksheet.

See Attachment 3 for a facility schematic/diagram.

TABLE 1 – Outfall Description				
Outfall Number	Discharge Sources	Treatment	Average Flow (Proposed)	Outfall Latitude and Longitude
001	Industrial Wastewater (Filter Backwash, Super Pulsator Blowdown, Filter Rewash, Centrifuge Centrate Return)	See Item 10 above.	0.414 MGD	38° 20' 12? N 77° 32' 60? W
002	Industrial Wastewater / Storm Water (Finished Water Tank Overflow, Clarifier Overflow)	See Item 10 above.	Intermittent (Emergency Outfall)	38° 20' 12? N 77° 32' 60? W
See Attachment 4 for (Salem Church, DEQ #183D) topographic map.				

11. Sludge Treatment and Disposal Methods:

The industrial solids generated at this proposed water treatment facility will be processed in a centrifuge and then transported to the Rappahannock Regional Solid Waste Management Board Landfill (VAR051413) in Stafford.

12. Discharges, Intakes, Monitoring Stations, Other Items in Vicinity of Discharge:

TABLE 2	
The facilities and monitoring stations listed below either discharge to or are located within the following waterbody: VAN-E19R	
3RPR-1-SOS	Citizen monitoring station.
3-RPP113.37	DEQ ambient monitoring station located on the Rappahannock River approximately 4.06 miles downstream of the outfall location.
VA0060348	Hartwood Elementary School (Horsepen Run, UT)
VA0092193	Saint Patrick's Church (LaRogue Run)
VAG406459	Mian Residence (Lick Run, UT)
VAG840091	Vulcan Construction Materials – West Lake (Horsepen Run, UT)

13. Material Storage: Not applicable as the facility is not yet constructed.

14. Site Inspection: Performed by Susan Mackert and Alison Thompson on June 24, 2010. (Attachment 5).

15. Receiving Stream Water Quality and Water Quality Standards:a) Ambient Water Quality Data

The nearest Department of Environmental Quality ambient monitoring station, 3-RPP113.37, is located in segment VAN-E19R_RPP01A02 approximately 4.06 miles downstream from the outfall location. This segment begins at the confluence with Golin Run and continues downstream until the confluence with an unnamed tributary to the Rappahannock River. The receiving stream, Rocky Pen Run, is not listed on the current 303(d) list.

The 2008 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report (IR) gives an impaired classification for the following downstream locations:

- Aquatic Life Use and Open-Water Aquatic Life Sub-Use

VANE20E_RPP03A02: An open water assessment of dissolved oxygen values during the summer season showed that the Tidal Freshwater Rappahannock (RPPTF) was not supporting. The RPPTF was 0.999 percent above cumulative frequency distribution. The segment is considered impaired for the aquatic life use.

- Fish Consumption Use Impairment (PCBs)

VANE20E_RPP03A02: The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. The advisory, dated 12/13/04, limits American eel, blue catfish, carp, channel catfish, croaker, gizzard shad, and anadromous (coastal) striped bass consumption to no more than two meals per month. The affected stretch extends from the I-95 bridge above Fredericksburg downstream to the mouth of the river near Stingray Point, including its tributaries to Hazel Run up to the I-95 bridge crossing and Claiborne Run up to the Route 1 bridge crossing.

- Recreation Use

VANE20E_RPP03A02: Sufficient excursions from the instantaneous *E. coli* criterion (8 of 30 samples – 26.7%) were recorded at DEQ's ambient water quality monitoring station (3-RPP110.57) at the Route 1 crossing to assess this stream segment as not supporting of the aquatic life use goal for the 2008 water quality assessment.

The following Total Maximum Daily Load (TMDL) schedule has been established.

- Aquatic Life Use – 2010
- Fish Tissue (PCB) - 2016

The following Total Maximum Daily Loads (TMDLs) have been established.

- Recreation Use - Approved by EPA 5/5/2008

The complete planning statement is located within the permit issuance file.

b) Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, Rocky Pen Run, is located within Section 3a of the Rappahannock River Basin, and classified as a Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C, and maintain a pH of 6.0-9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving stream.

When the 7Q10 of the receiving stream has been determined to be zero, staff may use effluent data when available. Because this is a proposed discharge and no effluent data is available, staff utilized a default temperature value of 25°C and a default hardness value of 50 mg/L CaCO₃ to calculate the water quality criteria for this receiving stream. Additionally, a default pH value of 8.0 S.U. was also used.

c) Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes, and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, Rocky Pen Run, is located within Section 3a of the Rappahannock River Basin. This section has been designated with a special standard of PWS.

Special Standard PWS designates a public water supply intake. The Board's Water Quality Standards establish numerical standards for specific parameters calculated to protect human health from toxic effects through drinking water and fish consumption. See 9VAC25-260-140 B for applicable criteria.

d) Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched on May 25, 2010, for records to determine if there are threatened or endangered species in the vicinity of the discharge. The following threatened or endangered species were identified within a 2 mile radius of the discharge: Dwarf Wedgemussel, Upland Sandpiper, Loggerhead Shrike, Bald Eagle, Green Floater, and Migrant Loggerhead Shrike. The limits proposed in this draft permit are protective of the Virginia Water Quality Standards and therefore, protect the threatened and endangered species found near the discharge.

The stream that the facility discharges to is within a reach identified as having an Anadromous Fish Use. It is staff's best professional judgment that the proposed limits are protective of this use.

16. Antidegradation (9VAC25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1 based on the stream having a 7Q10 and 1Q10 of zero. Permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLA) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLA's are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency, and statistical characteristics of the effluent data.

a) Effluent Screening:

This is a proposed discharge, and there is no data available.

b) Mixing Zones and Wasteload Allocations (WLAs):

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f) (Q_s)] - [(C_s) (f) (Q_s)]}{Q_e}$$

Where:

- WLA = Wasteload allocation
- C_o = In-stream water quality criteria
- Q_e = Design flow
- Q_s = Critical receiving stream flow
(1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; harmonic mean for carcinogen-human health criteria; 30Q10 for ammonia criteria; and 30Q5 for non-carcinogen human health criteria)
- f = Decimal fraction of critical flow
- C_s = Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 and Outfall 002 is considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C_o.

c) Effluent Limitations Toxic Pollutants - Outfall 001 and Outfall 002

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9VAC25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

1) Total Residual Chlorine:

Chlorine is used in the production process and is potentially in the discharge. Staff calculated WLAs for TRC using current critical flows. In accordance with current DEQ guidance, staff used a default data point of 0.2 mg/L and the calculated WLAs to derive limits. The calculated limitations generated a monthly average and a daily maximum of 0.016 mg/L (see Attachment 6).

However, the *VPDES General Permit for Potable Water Treatment Plants*, 9VAC25-860, has set a monthly average and daily maximum of 0.011 mg/L for TRC. Since these limitations are more stringent, a monthly average and daily maximum TRC limitation of 0.011 mg/L is proposed for this issuance.

Outfall 001

In accordance with 9VAC25-860 et seq., a monitoring frequency of once per month (1/M) is proposed with this issuance.

Outfall 002

Because Outfall 002 is an intermittent emergency discharge, a monitoring frequency of once per month in which a discharge occurs (1/M) is proposed with this issuance. This monitoring frequency meets the intent of the requirements found within 9VAC25-860 et seq.

d) Effluent Limitations and Monitoring, Conventional and Non-Conventional Pollutants – Outfall 001 and Outfall 002

1) Total Suspended Solids:

The *VPDES General Permit for Potable Water Treatment Plants*, 9VAC25-860, has set a monthly average of 30 mg/L and a daily maximum of 60 mg/L for TSS. As such, a monthly average of 30 mg/L and a daily maximum of 60 mg/L for TSS are proposed for this issuance.

Outfall 001

In accordance with 9VAC25-860 et seq., a monitoring frequency of once per month (1/M) is proposed with this issuance.

Outfall 002

Because Outfall 002 is an intermittent emergency discharge, a monitoring frequency of once per month in which a discharge occurs (1/M) is proposed with this issuance. This monitoring frequency meets the intent of the requirements found within 9VAC25-860 et seq.

2) pH:

Limitations for pH are set at the water quality criteria.

Outfall 001

In accordance with 9VAC25-860 et seq., a monitoring frequency of once per month (1/M) is proposed with this issuance.

Outfall 002

Because Outfall 002 is an intermittent emergency discharge, a monitoring frequency of once per month in which a discharge occurs (1/M) is proposed with this issuance. This monitoring frequency meets the intent of the requirements found within 9VAC25-860 et seq.

e) Effluent Limitations and Monitoring Summary.

The effluent limitations and monitoring requirements are presented in the following table. Limits were established for Total Suspended Solids, pH, and Total Residual Chlorine.

The limits for Total Suspended Solids and Total Residual Chlorine are based 9VAC25-860-10 et seq.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual, and 9VAC25-860-10 et seq.

18. Antibalancing:

Balancing is not applicable as this is a permit issuance.

19a. Effluent Limitations/Monitoring Requirements: Outfall 001 (Potable Water Treatment Discharge)

Proposed Flow is 0.414 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/M	Estimate
pH	2	NA	NA	6.0 S.U.	9.0 S.U.	1/M	Grab
Total Suspended Solids (TSS)	1,3	30 mg/L	NA	NA	60 mg/L	1/M	5G/8H-C
Total Residual Chlorine	2,3	0.011 mg/L	NA	NA	0.011 mg/L	1/M	Grab
Chronic Toxicity – <i>C. dubia</i> (TU _c)	NA	NA	NA	NA	NL	1/3M ^{a,b}	5G/8H-C
Chronic Toxicity – <i>P. promelas</i> (TU _c)	NA	NA	NA	NA	NL	1/3M ^{a,b}	5G/8H-C

- The basis for the limitations codes are:
- 1. Best Professional Judgement
 - 2. Water Quality Standards
 - 3. 9VAC25-860 (VPDES General Permit for Potable Water Treatment Plants)
- MGD* = Million gallons per day.
NA = Not applicable.
NL = No limit; monitor and report.
S.U. = Standard units.
- 1/M* = Once every month.
1/3M = Once every three months.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

5G/8H-C = 5 Grab/Eight Hour Composite - Consisting of five (5) grab samples collected at hourly intervals until the discharge ceases or five (5) grab samples taken at equal time intervals for the duration of the discharge if the discharge is less than eight (8) hours in length.

- a. Quarterly monitoring is to commence six (6) months after initial discharge.
- b. The quarterly monitoring periods shall be January 1 - March 31, April 1 - June 30, July 1 - September 30 and October 1 - December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (April 10, July 10, October 10 and January 10, respectively)

19b. Effluent Limitations/Monitoring Requirements: Outfall 002 (Intermittent Emergency Potable Water Treatment Discharge / Storm Water)

Variable flow based on emergency use.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/M	Estimate
pH	2	NA	NA	6.0 S.U.	9.0 S.U.	1/M	Grab
Total Suspended Solids (TSS)	1,3	30 mg/L	NA	NA	60 mg/L	1/M	5G/8H-C
Total Residual Chlorine	2,3	0.011 mg/L	NA	NA	0.011 mg/L	1/M	Grab

The basis for the limitations codes are: *MGD* = Million gallons per day.

1/M = Once every month in which there is a discharge.

- 1. Best Professional Judgement *NA* = Not applicable.
- 2. Water Quality Standards *NL* = No limit; monitor and report.
- 3. 9VAC25-860 (VPDES General Permit for Potable Water Treatment Plants) *S.U.* = Standard units.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

5G/8H-C = 5 Grab/Eight Hour Composite - Consisting of five (5) grab samples collected at hourly intervals until the discharge ceases or five (5) grab samples taken at equal time intervals for the duration of the discharge if the discharge is less than eight (8) hours in length.

20. Other Permit Requirements :

- a) Part I.B. of the permit contains quantification levels and compliance reporting instructions.

9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

- b) Permit Section Part I.C., details the requirements for the Toxics Management Program.

The VPDES Permit Regulation at 9VAC25-31-210 requires monitoring and 9VAC25-31-220.I, requires limitations in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Law and the Clean Water Act. A TMP is imposed for those determined by the Board to have the potential for toxicity or instream impact based on an evaluation of manufacturing processes, indirect discharges, treatment processes, effluent or receiving stream data or other relevant information.

This discharge results from the production of municipal drinking water. DEQ staff's best professional judgement has determined that a potential does exist from these types of discharges to be toxic to the receiving stream; therefore, quarterly chronic monitoring is proposed, commencing six (6) months after initially discharging (Attachment 6).

21. Reservoir Treatment:

The facility has proposed the use of liquid copper sulfate for algae control within the reservoir. Currently Stafford County uses EarthTec®, a liquid copper algicide and bactericide, on other County owned reservoirs.

EarthTec® is registered by the U.S. EPA for use in lakes, ponds, reservoirs, canals, lagoons, and other water systems. Per the product's web site, the copper in EarthTec® is fully dissolved with the release of the cupric ion which is controlled by biological demand (i.e., an algae bloom) rather than by water conditions. The active ingredient in the product is Copper Sulfate Pentahydrate (20%).

It is staff's best professional judgement that the effluent from Outfall 001 be monitored for total recoverable copper and sulfate each day copper sulfate is applied to the reservoir. The permittee shall be required to maintain a monthly log documenting the date of application and quantity of treatment chemical applied. Copper and sulfate monitoring results, as well as a copy of the monthly log, shall be submitted with the Discharge Monitoring Report for Outfall 001.

22. Other Special Conditions :

- a) O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; Sewage Collection and Treatment Regulations, 9VAC25-790; VPDES Permit Regulation, 9VAC25-31-190.E. The permittee shall submit for approval an Operations and Maintenance (O&M) to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO) no less than 90 days prior to beginning potable water production. Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
- b) Solids Handling and Disposal Plan. The permittee shall submit for approval a Solids Handling and Disposal Plan to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO) no less than 90 days prior to beginning potable water production. Future changes shall be addressed by the submittal of a revised Solids Handling and Disposal Plan within 90 days of the changes. Non-compliance with the Solids Handling and Disposal Plan shall be deemed a violation of the permit.

- c) Water Quality Criteria Monitoring. State Water Control Law §62.1-44.21 authorizes the Board to request information needed to determine the discharge's impact on State waters. States are required to review data on discharges to identify actual or potential toxicity problems, or the attainment of water quality goals, according to 40 CFR Part 131, Water Quality Standards, subpart 131.11. To ensure that water quality criteria are maintained, the permittee is required to analyze the facility's effluent from Outfall 001 for the substances noted in Attachment A of this VPDES permit. Monitoring shall be initiated after the start of the third year from the permit's effective date. The data shall be submitted with the facility's next permit application package.
- d) Water Quality Criteria Reopener. The VPDES Permit Regulation at 9VAC25-31-220 D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should data collected and submitted for Attachment A of the permit, indicate the need for limits to ensure protection of water quality criteria, the permit may be modified or alternately revoked and reissued to impose such water quality-based limitations.
- e) Minimum Freeboard. The permittee shall maintain a minimum freeboard of one (1) foot in the bioretention pond except during the occurrence of a 25-year, 24-hour storm event. Should the one-foot freeboard requirement be violated, the permittee shall immediately notify DEQ-NRO describing measures taken to correct the problem. Within five (5) days of the notification, the permittee shall submit a written explanation statement and corrective measures.
- f) Notification Levels. The permittee shall notify the Department as soon as they know or have reason to believe:
- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter;
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
 - b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter;
 - (2) One milligram per liter for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
- g) Materials Handling/Storage. 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.
- h) Copper and Sulfate Monitoring. The effluent from Outfall 001 shall be monitored for total recoverable copper and sulfate each day copper sulfate is applied to the reservoir. The permittee shall also maintain a monthly log documenting the date of application and quantity of treatment chemical applied. Copper and sulfate results, as well as a copy of the monthly log, shall be submitted with the Discharge Monitoring

Permit Section Part II. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

23. Changes to the Permit from the Previously Issued Permit:

- a) Special Conditions: Not applicable as this is a permit issuance.
- b) Monitoring and Effluent Limitations: Not applicable as this is a permit issuance.

24. Variances/Alternate Limits or Conditions : N/A**25. Public Notice Information:**

First Public Notice Date: September 1, 2010 Second Public Notice Date: September 8, 2010

Public Notice Information is required by 9VAC25-31-280 B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3853, susan.mackert@deq.virginia.gov. See Attachment 7 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

26. 303 (d) Listed Stream Segments and Total Max. Daily Loads (TMDL):

The nearest Department of Environmental Quality ambient monitoring station, 3-RPP113.37, is located in segment VAN-E19R_RPP01A02 approximately 4.06 miles downstream from the outfall location. This segment begins at the confluence with Golin Run and continues downstream until the confluence with an unnamed tributary to the Rappahannock River. The receiving stream, Rocky Pen Run, is not listed on the current 303(d) list.

TMDL Reopener: This special condition is to allow the permit to be reopened if necessary to bring it in compliance with any applicable TMDL that may be developed and approved for the receiving stream.

27. Additional Comments:

Previous Board Action(s): None

Staff Comments: None

Public Comment: No comments were received during the public notice.

EPA Checklist: The checklist can be found in Attachment 8.

Fact Sheet Attachments – Table of Contents

Rocky Pen Run Water Treatment Facility VA0092568

2010 Issuance

Attachment 1	Flow Frequency Determination / Site Visit Memorandum
Attachment 2	Permit Rating Worksheet
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Attachment 6	WET Determination
Attachment 7	Public Notice
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MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court

Woodbridge, VA 22193

SUBJECT: Flow Frequency Determination and Site Visit Memorandum
Rocky Pen Run Water Treatment Facility (VA0092568)

TO: Permit Issuance File

FROM: Susan Mackert

DATE: June 24, 2010

As of the date of this memorandum, the Rocky Pen Run Water Treatment Facility is not yet constructed. Construction of the reservoir is underway (photos 1 - 2) with an estimated project completion date of 2012 or 2013. The reservoir will be approximately 90 to 115 feet deep with an earthen dam and will comprise roughly 500 acres. The facility will be required to maintain a minimum instream flow frequency of 1.5 cubic feet per second (cfs) to 8.0 cfs.

The discharge from the Rocky Pen Run Water Treatment Facility will enter Rocky Pen Run in Stafford County, north of the Rappahannock River. At the time of the site visit, a small flow was noted in Rocky Pen Run. The stream is approximately 5 feet wide with an average depth of roughly five to six inches (photo 3).

Stream flow frequencies are required at this site for use in developing effluent limitations for the VPDES permit. Because the USGS does not maintain a gaging station on the Rappahannock River in the vicinity of the proposed discharge location, flow frequencies cannot be determined using drainage area comparisons.

It is staff's best professional judgement that all critical flows for the facility be zero based on the following rationale:

- 1) The proposed discharge locations for both Outfall 001 and Outfall 002 are below the dam. The outfall locations are in close proximity to one another, approximately 500 to 1000 feet apart. The following are noted:
 - The facility plans to utilize a concrete lined conveyance channel to discharge industrial wastewater from the water treatment plant (Outfall 001 – photos 4 and 5) to a perennial stream. At times, the receiving stream may be comprised entirely of effluent from the water treatment plant.
 - The facility plans to utilize a rip rap channel (Outfall 002 – photo 6) to discharge storm water, and potentially finished water tank overflow and clarifier overflow, to a perennial stream. Discharge from this outfall will be on an intermittent, emergency basis.
- 2) Planning staff were asked to determine the drainage area for the outfall location as this is a new permit issuance. Based on planning staff's review, the drainage area was determined to be 5.2 square miles. When drainage areas are five square miles or less, staff utilizes best professional judgement in that critical flows will be equal to zero. Because there is very little difference between the drainage area values, staff believes best professional judgement is applicable and critical flows will be equal to zero.



Photo 1. Rocky Pen Run Reservoir. Combined with photo two shows general size and location.



Photo 2. Rocky Pen Run Reservoir. Combined with photo one shows general size and location.



Photo 3. Rocky Pen Run.



Photo 4. Area where concrete lined conveyance will be constructed for discharge via Outfall 001. Flow is in the direction of the arrow.



Photo 5. General area of Outfall 001.



Photo 6. Proposed area of Outfall 002. The arrow indicates the general location of the rip rap channel and direction of flow.

NPDES PERMIT RATING WORK SHEET

VPDES NO. : VA0092568

- Regular Addition
- Discretionary Addition
- Score change, but no status Change
- Deletion

Facility Name: Rocky Pen Run Water Treatment Facility
 City / County: Fredericksburg / Stafford
 Receiving Water: Rocky Pen Run
 Waterbody ID: VAN-E19R

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power Plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rater

- YES; score is 700 (stop here)
 NO; (continue)

Yes; score is 600 (stop here) NO; (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary Sic Code: 4941 Other Sic Codes: _____
 Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	15	<input checked="" type="checkbox"/> 7.	7	35
<input type="checkbox"/> 1.	1	5	<input type="checkbox"/> 4.	4	20	<input type="checkbox"/> 8.	8	40
<input type="checkbox"/> 2.	2	10	<input type="checkbox"/> 5.	5	25	<input type="checkbox"/> 9.	9	45
			<input type="checkbox"/> 6.	6	30	<input type="checkbox"/> 10.	10	50

Code Number Checked: 7
Total Points Factor 1: 35

FACTOR 2: Flow/Stream Flow Volume (Complete either Section A or Section B; check only one)

Section A – Wastewater Flow Only considered

Wastewater Type (see Instructions)	Code	Points
Type I: Flow < 5 MGD	<input type="checkbox"/> 11	0
Flow 5 to 10 MGD	<input type="checkbox"/> 12	10
Flow > 10 to 50 MGD	<input type="checkbox"/> 13	20
Flow > 50 MGD	<input type="checkbox"/> 14	30
Type II: Flow < 1 MGD	<input checked="" type="checkbox"/> 21	10
Flow 1 to 5 MGD	<input type="checkbox"/> 22	20
Flow > 5 to 10 MGD	<input type="checkbox"/> 23	30
Flow > 10 MGD	<input type="checkbox"/> 24	50
Type III: Flow < 1 MGD	<input type="checkbox"/> 31	0
Flow 1 to 5 MGD	<input type="checkbox"/> 32	10
Flow > 5 to 10 MGD	<input type="checkbox"/> 33	20
Flow > 10 MGD	<input type="checkbox"/> 34	30

Section B – Wastewater and Stream Flow Considered

Wastewater Type (see Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow	Code	Points
Type I/III:	< 10 %	<input type="checkbox"/> 41	0
	10 % to < 50 %	<input type="checkbox"/> 42	10
	> 50%	<input type="checkbox"/> 43	20
Type II:	< 10 %	<input type="checkbox"/> 51	0
	10 % to < 50 %	<input type="checkbox"/> 52	20
	> 50 %	<input type="checkbox"/> 53	30

Code Checked from Section A or B: 21
Total Points Factor 2: 10

NPDES PERMIT RATING WORK SHEET

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) BOD COD Other: _____

Permit Limits: (check one)

	Code	Points
<input type="checkbox"/> < 100 lbs/day	1	0
<input type="checkbox"/> 100 to 1000 lbs/day	2	5
<input type="checkbox"/> > 1000 to 3000 lbs/day	3	15
<input type="checkbox"/> > 3000 lbs/day	4	20

Code Number Checked: N/A
Points Scored: 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)

	Code	Points
<input checked="" type="checkbox"/> < 100 lbs/day	1	0
<input type="checkbox"/> 100 to 1000 lbs/day	2	5
<input type="checkbox"/> > 1000 to 5000 lbs/day	3	15
<input type="checkbox"/> > 5000 lbs/day	4	20

Code Number Checked: 1
Points Scored: 0

C. Nitrogen Pollutants: (check one) Ammonia Other: _____

Permit Limits: (check one)

	Code	Points
<input type="checkbox"/> < 300 lbs/day	1	0
<input type="checkbox"/> 300 to 1000 lbs/day	2	5
<input type="checkbox"/> > 1000 to 3000 lbs/day	3	15
<input type="checkbox"/> > 3000 lbs/day	4	20

Code Number Checked: N/A
Points Scored: 0
Total Points Factor 3: 0

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

YES; (If yes, check toxicity potential number below)

NO; (If no, go to Factor 5)

Determine the *Human Health* potential from Appendix A. Use the same SIC doe and subcategory reference as in Factor 1. (Be sure to use the *Human Health* toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	0	<input checked="" type="checkbox"/> 7.	7	15
<input type="checkbox"/> 1.	1	0	<input type="checkbox"/> 4.	4	0	<input type="checkbox"/> 8.	8	20
<input type="checkbox"/> 2.	2	0	<input type="checkbox"/> 5.	5	5	<input type="checkbox"/> 9.	9	25
			<input type="checkbox"/> 6.	6	10	<input type="checkbox"/> 10.	10	30

Code Number Checked: 7
Total Points Factor 4: 15

NPDES PERMIT RATING WORK SHEET

FACTOR 5: Water Quality Factors

A. *Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been to the discharge*

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

B. *Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?*

	Code	Points
<input checked="" type="checkbox"/> YES	1	0
<input type="checkbox"/> NO	2	5

C. *Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?*

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

Code Number Checked: A 2 B 1 C 2
Points Factor 5: A 0 + B 0 + C 0 = 0

FACTOR 6: Proximity to Near Coastal Waters

A. Base Score: Enter flow code here (from factor 2) _____

Check appropriate facility HPRI code (from PCS):				Enter the multiplication factor that corresponds to the flow code: <u>0.10</u>		
HPRI#	Code	HPRI Score		Flow Code	Multiplication Factor	
<input type="checkbox"/> 1	1	20		11, 31, or 41	0.00	
<input type="checkbox"/> 2	2	0		12, 32, or 42	0.05	
<input type="checkbox"/> 3	3	30		13, 33, or 43	0.10	
<input type="checkbox"/> 4	4	0		14 or 34	0.15	
<input checked="" type="checkbox"/> 5	5	0		21 or 51	0.10	
				22 or 52	0.30	
				23 or 53	0.60	
				24	1.00	

HPRI code checked : 4

Base Score (HPRI Score): 0 X (Multiplication Factor) 0.10 = 0

B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

Code	Points
<input type="checkbox"/> 1	10
<input checked="" type="checkbox"/> 2	0

C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)?

Code	Points
<input type="checkbox"/> 1	10
<input checked="" type="checkbox"/> 2	0

Code Number Checked: A 4 B 2 C 2
Points Factor 6: A 0 + B 0 + C 0 = 0

NPDES PERMIT RATING WORK SHEET

SCORE SUMMARY

<u>Factor</u>	<u>Description</u>	<u>Total Points</u>
1	Toxic Pollutant Potential	35
2	Flows / Streamflow Volume	10
3	Conventional Pollutants	0
4	Public Health Impacts	15
5	Water Quality Factors	0
6	Proximity to Near Coastal Waters	0
TOTAL (Factors 1 through 6)		60

S1. Is the total score equal to or greater than 80 YES; (Facility is a Major) NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

NO

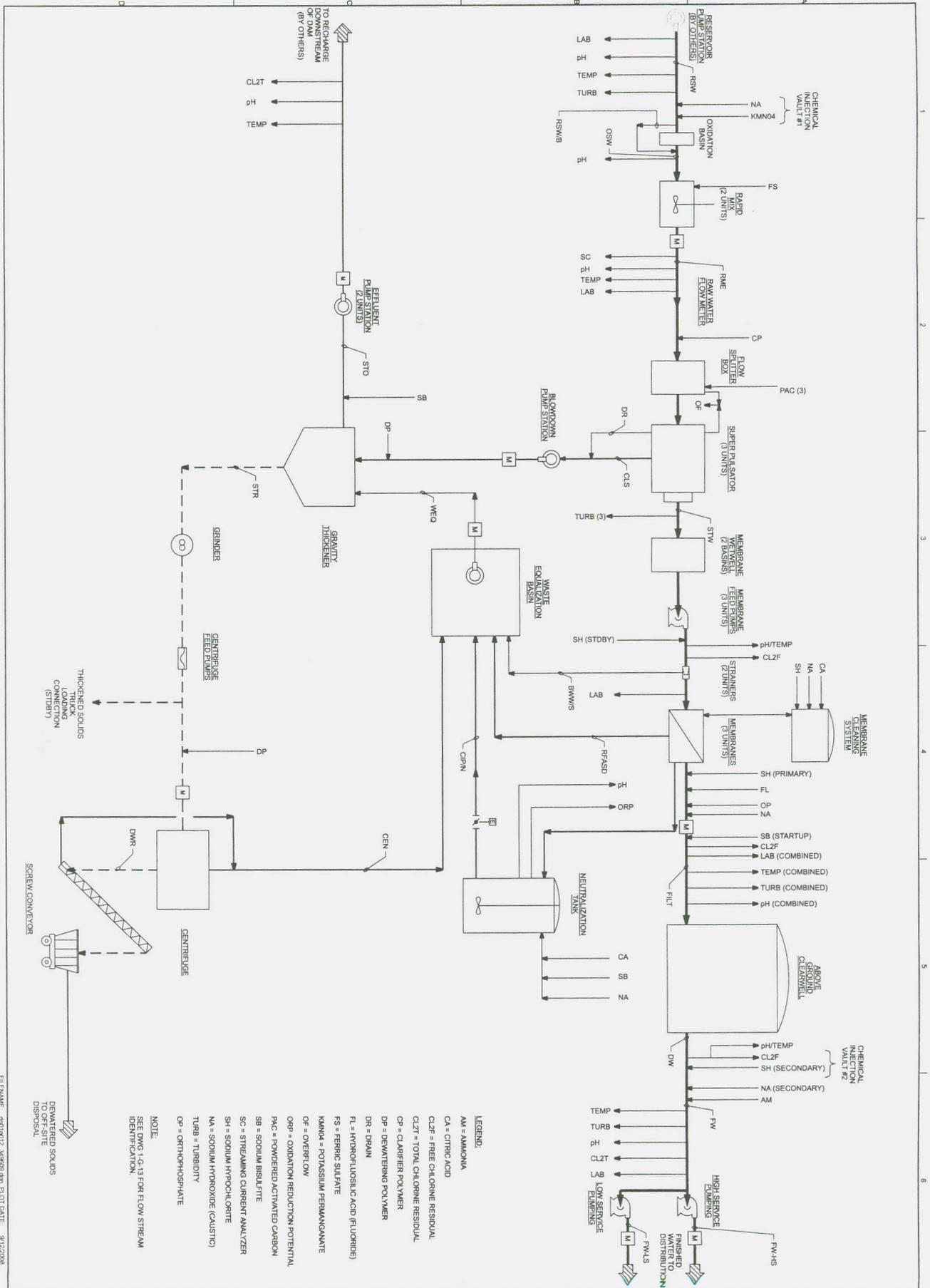
YES; (Add 500 points to the above score and provide reason below:

Reason:

NEW SCORE : 60

OLD SCORE : N/A

Permit Reviewer's Name : Susan Mackert
 Phone Number: (703) 583-3853
 Date: June 15, 2010



LEGEND:
 AM = AMMONIA
 CA = CITRIC ACID
 CL2F = FREE CHLORINE RESIDUAL
 CL2T = TOTAL CHLORINE RESIDUAL
 CP = CLARIFIER POLYMER
 DP = DEMATERING POLYMER
 DR = DRAIN
 FL = HYDROFLUOSILIC ACID (FLUORIDE)
 FS = FERRIC SULFATE
 KMMN4 = POTASSIUM PERMANGANATE
 OP = OVERTFLOW
 ORP = OXIDATION REDUCTION POTENTIAL
 PAC = POWDERED ACTIVATED CARBON
 SB = SODIUM BISULFITE
 SC = STREAMING CURRENT ANALYZER
 SH = SODIUM HYPOCHLORITE
 NA = SODIUM HYDROXIDE (CAUSTIC)
 TURB = TURBIDITY
 OP = ORTHOPHOSPHATE

NOTE:
 SEE DWG 14-2-18 FOR FLOW STREAM IDENTIFICATION.

FILENAME: rpr01gw12_248609.dgn PLOT DATE: 9/12/2008

VERIFY SCALE

DATE	BY	APPROVED
JUNE 2008		
PROJ	348609	RP
DWG	14-20	
SHEET		

PLOT TIME: 9:53:21 AM

CH2MHILL

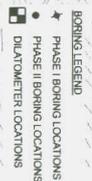
GENERAL PROCESS FLOW DIAGRAM

ROCKY PEN RUN WATER TREATMENT FACILITY
 STAFFORD COUNTY, VIRGINIA

NO	DATE	REVISION	BY	APVD
DSGN				
J. SELIG		S. KORCSMAROS	CHECKED BY	G. PALEN

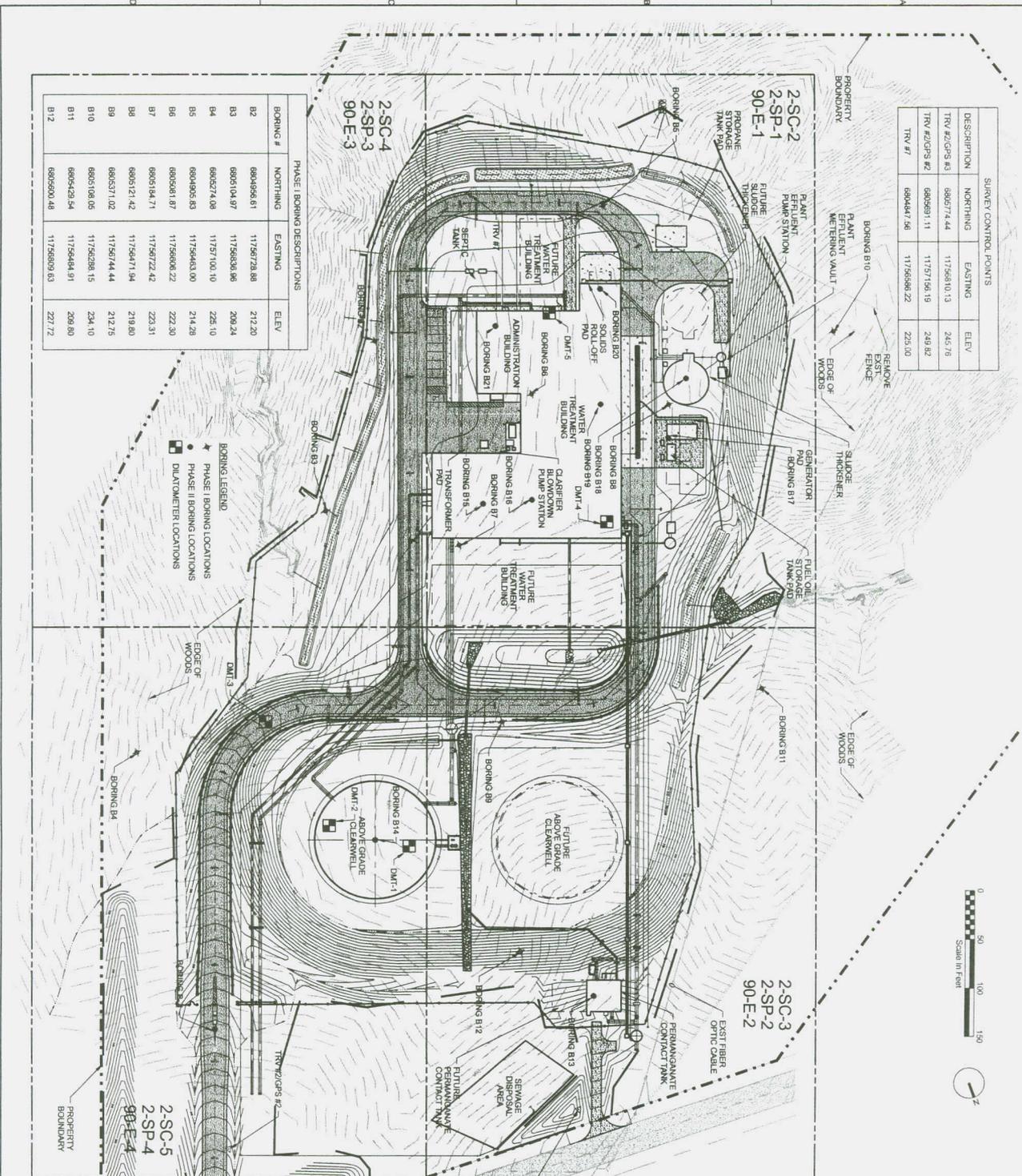
SURVEY CONTROL POINTS			
DESCRIPTION	NORTHING	EASTING	ELEV
TRV #2/GPS #3	686574.44	11756810.13	245.76
TRV #2/GPS #2	686599.11	11757196.19	249.82
TRV #7	686464.79	11756986.22	225.00

PHASE II BORING DESCRIPTIONS			
BORING #	NORTHING	EASTING	ELEV
B2	6864956.61	11756728.88	212.20
B3	6865104.97	11756836.96	208.24
B4	6865274.08	11757100.10	226.10
B5	6864965.83	11756463.00	214.28
B6	6865081.87	11756806.22	223.30
B7	6865184.71	11756722.42	223.31
B8	6865121.42	11756471.94	219.80
B9	6865371.02	11756744.44	212.75
B10	6865108.05	11756288.15	234.10
B11	6865425.54	11756464.91	208.80
B12	6865950.48	11756809.63	227.72



- NOTES**
1. SURVEY DATA IS BASED ON THE NATIONAL GRID NORTH ZONE PER GPS OBSERVATIONS PERFORMED BY DAVIS ADREN ASSOCIATES.
 2. SURVEY IS BASED ON A CURRENT FIELD SURVEY PERFORMED ON JAN 24, 2007.
 3. FIBER OPTIC LINE AS SHOWN BASED ON ROUND FIBER OPTIC SURVEY DATA (NOT A SUBSURFACE DESIGNATION DETERMINED BY SUBSURFACE DESIGNATION (APPROXIMATE ONLY)).

PHASE II BORING DESCRIPTIONS			
BORING #	NORTHING	EASTING	ELEV
B13	6865689.09	11759755.55	237.75
B14	6865441.70	11756807.69	221.00
B15	6865152.90	11756884.73	224.00
B16	6865166.12	11756836.90	221.75
B-17	6865151.28	11756463.41	219.75
B18	6865102.09	11756445.62	220.75
B19	6865097.19	11756537.28	219.25
B20	6864964.65	11756465.77	218.00
B21	6865094.25	11756608.72	226.00
P-1	6865070.30	11757128.46	238.50
DMT-1	6865459.59	11756877.39	218.75
DMT-2	6865411.63	11756946.16	223.50
DMT-3	6865288.47	11756989.26	216.00
DMT-4	6865131.51	11756573.47	219.50
DMT-5	6864960.30	11756562.82	221.50



FILENAME: 0620001_246609.dwg PLOT DATE: 01/12/2008

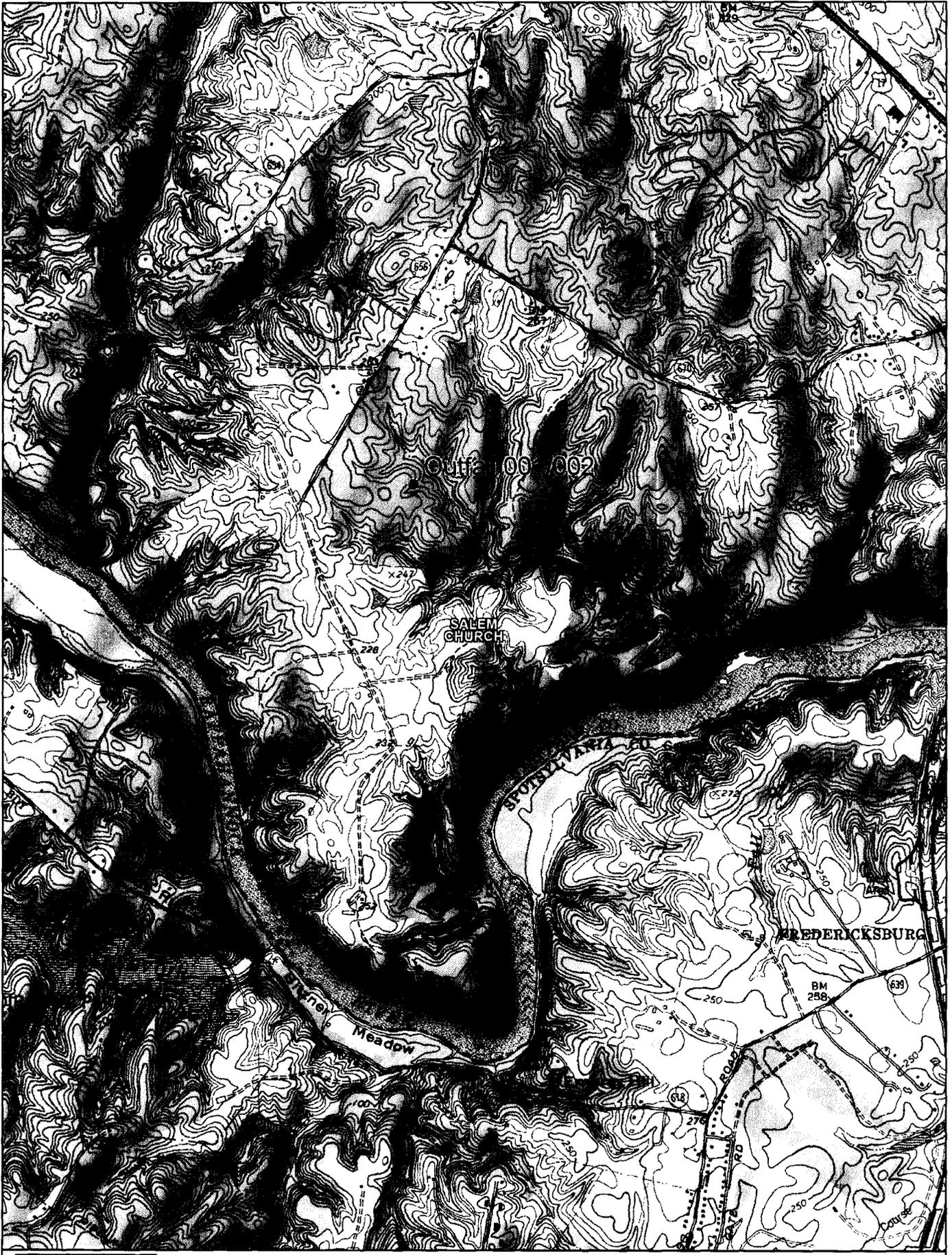


**SITE CIVIL
OVERALL SITE PLAN
AND KEY PLAN**

ROCKY PEN RUN
WATER TREATMENT FACILITY
STAFFORD COUNTY, VIRGINIA

DATE	DATE	DATE	DATE
PROJ	DATE	DATE	DATE
DWG	DATE	DATE	DATE
SHEET	DATE	DATE	DATE

NO.	DATE	REVISION	BY	APVD
1		DR	H. LUSK	
2		CHK	H. LUSK	
3		CHECKED BY	G. PALEN	



DeLORME

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www.delorme.com

Scale 1 : 25,000
 1" = 2080 ft



FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Rocky Pen Run WTP

Permit No.: VA0092568

Receiving Stream: Rocky Pen Run

Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information

Mean Hardness (as CaCO3) =
 90% Temperature (Annual) =
 90% Temperature (Wet season) =
 90% Maximum pH =
 10% Maximum pH =
 Tier Designation (1 or 2) =
 Public Water Supply (PWS) Y/N? =
 Trout Present Y/N? =
 Early Life Stages Present Y/N? =

Stream Flows

1Q10 (Annual) =
 7Q10 (Annual) =
 3Q10 (Annual) =
 1Q10 (Wet season) =
 3Q10 (Wet season) =
 3Q05 =
 Harmonic Mean =

Mixing Information

Annual - 1Q10 Mix =
 - 7Q10 Mix =
 - 3Q10 Mix =
 Wet Season - 1Q10 Mix =
 - 3Q10 Mix =

Effluent Information

Mean Hardness (as CaCO3) =
 90% Temp (Annual) =
 90% Temp (Wet season) =
 90% Maximum pH =
 10% Maximum pH =
 Discharge Flow =

Parameter (µg/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)
Acephenone	0	--	--	6.7E+02	9.9E+02	--	6.7E+02	9.9E+02	--	--	--	--	6.7E+02	9.9E+02	--	
Acrocin	0	--	--	6.1E+00	9.3E+00	--	6.1E+00	9.3E+00	--	--	--	--	6.1E+00	9.3E+00	--	
Acrylonitrile ^c	0	--	--	5.1E+01	2.5E+00	--	5.1E+01	2.5E+00	--	--	--	--	5.1E+01	2.5E+00	--	
Aldrin ^c	0	3.0E+00	--	4.9E+04	5.0E+04	--	4.9E+04	5.0E+04	--	--	--	--	3.0E+00	4.9E+04	5.0E+04	
Ammonia-N (mg/l) (Yearly)	0	8.41E+00	1.24E+00	--	--	8.4E+00	1.2E+00	--	--	--	--	--	8.4E+00	1.2E+00	--	
Ammonia-N (mg/l) (High Flow)	0	8.41E+00	2.43E+00	--	--	8.4E+00	2.4E+00	--	--	--	--	--	8.4E+00	2.4E+00	--	
Anthracene	0	--	--	8.3E+03	4.0E+04	--	8.3E+03	4.0E+04	--	--	--	--	8.3E+03	4.0E+04	--	
Antimony	0	--	--	5.6E+00	6.4E+02	--	5.6E+00	6.4E+02	--	--	--	--	5.6E+00	6.4E+02	--	
Arsenic	0	3.4E+02	1.5E+02	1.0E+01	--	3.4E+02	1.5E+02	1.0E+01	--	--	--	--	3.4E+02	1.5E+02	1.0E+01	
Barium	0	--	--	2.0E+03	--	--	2.0E+03	--	--	--	--	--	2.0E+03	--	--	
Benzene ^c	0	--	--	2.2E+01	5.1E+02	--	2.2E+01	5.1E+02	--	--	--	--	2.2E+01	5.1E+02	--	
Benzidine ^c	0	--	--	8.6E+04	2.0E+03	--	8.6E+04	2.0E+03	--	--	--	--	8.6E+04	2.0E+03	--	
Benzo (a) anthracene ^c	0	--	--	3.8E+02	1.8E+01	--	3.8E+02	1.8E+01	--	--	--	--	3.8E+02	1.8E+01	--	
Benzo (b) fluoranthene ^c	0	--	--	3.8E+02	1.8E+01	--	3.8E+02	1.8E+01	--	--	--	--	3.8E+02	1.8E+01	--	
Benzo (k) fluoranthene ^c	0	--	--	3.8E+02	1.8E+01	--	3.8E+02	1.8E+01	--	--	--	--	3.8E+02	1.8E+01	--	
Benzo (a) pyrene ^c	0	--	--	3.8E+02	1.8E+01	--	3.8E+02	1.8E+01	--	--	--	--	3.8E+02	1.8E+01	--	
Bis(2-Chloroethyl) Ether ^c	0	--	--	3.0E+01	5.3E+00	--	3.0E+01	5.3E+00	--	--	--	--	3.0E+01	5.3E+00	--	
Bis(2-Chloropropyl) Ether ^c	0	--	--	1.4E+03	6.5E+04	--	1.4E+03	6.5E+04	--	--	--	--	1.4E+03	6.5E+04	--	
Bis(2-Ethylhexyl) Phthalate ^c	0	--	--	1.2E+01	2.2E+01	--	1.2E+01	2.2E+01	--	--	--	--	1.2E+01	2.2E+01	--	
Bromofom ^c	0	--	--	4.3E+01	1.4E+03	--	4.3E+01	1.4E+03	--	--	--	--	4.3E+01	1.4E+03	--	
Bulybenzophthalate	0	--	--	1.5E+03	1.9E+03	--	1.5E+03	1.9E+03	--	--	--	--	1.5E+03	1.9E+03	--	
Cadmium	0	1.8E+00	6.6E-01	5.0E+00	--	1.8E+00	6.6E-01	5.0E+00	--	--	--	--	1.8E+00	6.6E-01	5.0E+00	
Carbon Tetrachloride ^c	0	--	--	2.3E+00	1.6E+01	--	2.3E+00	1.6E+01	--	--	--	--	2.3E+00	1.6E+01	--	
Chlordane ^c	0	2.4E+00	4.3E-03	8.0E-03	8.1E-03	2.4E+00	4.3E-03	8.0E-03	8.1E-03	2.4E+00	4.3E-03	8.0E-03	8.1E-03	2.4E+00	4.3E-03	
Chloride	0	8.6E+05	2.3E+05	2.5E+05	--	8.6E+05	2.3E+05	2.5E+05	--	--	--	--	8.6E+05	2.3E+05	2.5E+05	
TRC	0	1.9E+01	1.1E+01	--	--	1.9E+01	1.1E+01	--	--	--	--	--	1.9E+01	1.1E+01	--	
Chlorobenzene	0	--	--	1.3E+02	1.6E+03	--	1.3E+02	1.6E+03	--	--	--	--	1.3E+02	1.6E+03	--	

Parameter (µg/l unless noted)	Background Conc.	Water Quality Criteria			Wasteload Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	
Chlorodibromomethane ^c	0	--	--	4.0E+00	1.3E+02	--	--	4.0E+00	1.3E+02	--	--	4.0E+00	1.3E+02	--	--	4.0E+00	1.3E+02
Chlorodrom	0	--	--	3.4E+02	1.1E+04	--	--	3.4E+02	1.1E+04	--	--	3.4E+02	1.1E+04	--	--	3.4E+02	1.1E+04
2-Chloronaphthalene	0	--	--	1.0E+03	1.6E+03	--	--	1.0E+03	1.6E+03	--	--	1.0E+03	1.6E+03	--	--	1.0E+03	1.6E+03
2-Chlorophenol	0	--	--	8.1E+01	1.5E+02	--	--	8.1E+01	1.5E+02	--	--	8.1E+01	1.5E+02	--	--	8.1E+01	1.5E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	--	--	8.3E-02	4.1E-02	--	--	8.3E-02	4.1E-02	--	--	8.3E-02	4.1E-02	--	--
Chromium III	0	3.2E+02	4.2E+01	--	--	3.2E+02	4.2E+01	--	--	3.2E+02	4.2E+01	--	--	3.2E+02	4.2E+01	--	--
Chromium VI	0	1.6E+01	1.1E+01	--	--	1.6E+01	1.1E+01	--	--	1.6E+01	1.1E+01	--	--	1.6E+01	1.1E+01	--	--
Chromium, Total	0	--	--	1.0E+02	--	--	--	1.0E+02	--	--	--	--	--	1.0E+02	--	--	--
Chrysene ^c	0	--	--	3.8E-03	1.8E-02	--	--	3.8E-03	1.8E-02	--	--	3.8E-03	1.8E-02	--	--	3.8E-03	1.8E-02
Copper	0	7.0E+00	5.0E+00	1.3E+03	--	7.0E+00	5.0E+00	1.3E+03	--	7.0E+00	5.0E+00	1.3E+03	--	7.0E+00	5.0E+00	1.3E+03	--
Cyanide, Free	0	2.2E+01	5.2E+00	1.4E+02	1.6E+04	2.2E+01	5.2E+00	1.4E+02	1.6E+04	2.2E+01	5.2E+00	1.4E+02	1.6E+04	2.2E+01	5.2E+00	1.4E+02	1.6E+04
DDD ^c	0	--	--	3.1E-03	3.1E-03	--	--	3.1E-03	3.1E-03	--	--	3.1E-03	3.1E-03	--	--	3.1E-03	3.1E-03
DDE ^c	0	--	--	2.2E-03	2.2E-03	--	--	2.2E-03	2.2E-03	--	--	2.2E-03	2.2E-03	--	--	2.2E-03	2.2E-03
DDT ^c	0	1.1E+00	1.0E-03	2.2E-03	2.2E-03	1.1E+00	1.0E-03	2.2E-03	2.2E-03	1.1E+00	1.0E-03	2.2E-03	2.2E-03	1.1E+00	1.0E-03	2.2E-03	2.2E-03
Deltamethrin ^c	0	--	--	1.0E-01	--	--	--	1.0E-01	--	--	--	--	--	1.0E-01	--	--	--
Diazinon	0	1.7E-01	1.7E-01	--	--	1.7E-01	1.7E-01	--	--	1.7E-01	1.7E-01	--	--	1.7E-01	1.7E-01	--	--
Dibenz(a,h)anthracene ^c	0	--	--	3.8E-02	1.8E-01	--	--	3.8E-02	1.8E-01	--	--	3.8E-02	1.8E-01	--	--	3.8E-02	1.8E-01
1,2-Dichlorobenzene	0	--	--	4.2E+02	1.3E+03	--	--	4.2E+02	1.3E+03	--	--	4.2E+02	1.3E+03	--	--	4.2E+02	1.3E+03
1,3-Dichlorobenzene	0	--	--	3.2E+02	9.6E+02	--	--	3.2E+02	9.6E+02	--	--	3.2E+02	9.6E+02	--	--	3.2E+02	9.6E+02
1,4-Dichlorobenzene	0	--	--	6.3E+01	1.9E+02	--	--	6.3E+01	1.9E+02	--	--	6.3E+01	1.9E+02	--	--	6.3E+01	1.9E+02
3,3-Dichlorobenzidine ^c	0	--	--	2.1E-01	2.8E-01	--	--	2.1E-01	2.8E-01	--	--	2.1E-01	2.8E-01	--	--	2.1E-01	2.8E-01
Dichlorobromomethane ^c	0	--	--	5.5E+00	1.7E+02	--	--	5.5E+00	1.7E+02	--	--	5.5E+00	1.7E+02	--	--	5.5E+00	1.7E+02
1,2-Dichloroethane ^c	0	--	--	3.8E+00	3.7E+02	--	--	3.8E+00	3.7E+02	--	--	3.8E+00	3.7E+02	--	--	3.8E+00	3.7E+02
1,1-Dichloroethylene	0	--	--	3.3E+02	7.1E+03	--	--	3.3E+02	7.1E+03	--	--	3.3E+02	7.1E+03	--	--	3.3E+02	7.1E+03
1,2-trans-dichloroethylene	0	--	--	1.4E+02	1.0E+04	--	--	1.4E+02	1.0E+04	--	--	1.4E+02	1.0E+04	--	--	1.4E+02	1.0E+04
2,4-Dichlorophenol	0	--	--	7.7E+01	2.9E+02	--	--	7.7E+01	2.9E+02	--	--	7.7E+01	2.9E+02	--	--	7.7E+01	2.9E+02
2,4-Dichlorophenoxyacetic acid (2,4-D)	0	--	--	1.0E+02	--	--	--	1.0E+02	--	--	--	--	--	1.0E+02	--	--	--
1,2-Dichloropropane ^c	0	--	--	5.0E+00	1.5E+02	--	--	5.0E+00	1.5E+02	--	--	5.0E+00	1.5E+02	--	--	5.0E+00	1.5E+02
1,3-Dichloropropane ^c	0	--	--	3.4E+00	2.1E+02	--	--	3.4E+00	2.1E+02	--	--	3.4E+00	2.1E+02	--	--	3.4E+00	2.1E+02
Dieldrin ^c	0	2.4E-01	5.6E-02	5.2E-04	5.4E-04	2.4E-01	5.6E-02	5.2E-04	5.4E-04	2.4E-01	5.6E-02	5.2E-04	5.4E-04	2.4E-01	5.6E-02	5.2E-04	5.4E-04
Diethyl Phthalate	0	--	--	1.7E+04	4.4E+04	--	--	1.7E+04	4.4E+04	--	--	1.7E+04	4.4E+04	--	--	1.7E+04	4.4E+04
2,4-Dimethylphenol	0	--	--	3.8E+02	8.5E+02	--	--	3.8E+02	8.5E+02	--	--	3.8E+02	8.5E+02	--	--	3.8E+02	8.5E+02
Dimethyl Phthalate	0	--	--	2.7E+05	1.1E+06	--	--	2.7E+05	1.1E+06	--	--	2.7E+05	1.1E+06	--	--	2.7E+05	1.1E+06
D,n-Butyl Phthalate	0	--	--	2.0E+03	4.5E+03	--	--	2.0E+03	4.5E+03	--	--	2.0E+03	4.5E+03	--	--	2.0E+03	4.5E+03
2,4-Dinitrophenol	0	--	--	6.9E+01	5.3E+03	--	--	6.9E+01	5.3E+03	--	--	6.9E+01	5.3E+03	--	--	6.9E+01	5.3E+03
2-Methyl-4,6-Dinitrophenol	0	--	--	1.3E+01	2.8E+02	--	--	1.3E+01	2.8E+02	--	--	1.3E+01	2.8E+02	--	--	1.3E+01	2.8E+02
2,4-Dinitrotoluene ^c	0	--	--	1.1E+00	3.4E+01	--	--	1.1E+00	3.4E+01	--	--	1.1E+00	3.4E+01	--	--	1.1E+00	3.4E+01
Dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin	0	--	--	5.0E-08	5.1E-08	--	--	5.0E-08	5.1E-08	--	--	5.0E-08	5.1E-08	--	--	5.0E-08	5.1E-08
1,2-Diphenylhydrazine ^c	0	--	--	3.6E-01	2.0E+00	--	--	3.6E-01	2.0E+00	--	--	3.6E-01	2.0E+00	--	--	3.6E-01	2.0E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01
Beta-Endosulfan	0	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01	2.2E-01	5.6E-02	6.2E+01	8.9E+01
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--
Endosulfan Sulfate	0	--	--	6.2E+01	8.9E+01	--	--	6.2E+01	8.9E+01	--	--	6.2E+01	8.9E+01	--	--	6.2E+01	8.9E+01
Endrin	0	8.6E-02	3.6E-02	5.9E-02	6.0E-02	8.6E-02	3.6E-02	5.9E-02	6.0E-02	8.6E-02	3.6E-02	5.9E-02	6.0E-02	8.6E-02	3.6E-02	5.9E-02	6.0E-02
Endrin Aldehyde	0	--	--	2.9E-01	3.0E-01	--	--	2.9E-01	3.0E-01	--	--	2.9E-01	3.0E-01	--	--	2.9E-01	3.0E-01

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Ethylbenzene	0	--	--	5.3E+02	2.1E+03	--	--	5.3E+02	2.1E+03	--	--	--	--	--	--	--	--	5.3E+02	2.1E+03	--	--
Fluoranthene	0	--	--	1.3E+02	1.4E+02	--	--	1.3E+02	1.4E+02	--	--	--	--	--	--	--	--	1.3E+02	1.4E+02	--	--
Fluorene	0	--	--	1.1E+03	5.3E+03	--	--	1.1E+03	5.3E+03	--	--	--	--	--	--	--	--	1.1E+03	5.3E+03	--	--
Foaming Agents	0	--	--	5.0E+02	--	--	--	5.0E+02	--	--	--	--	--	--	--	--	--	5.0E+02	--	--	--
Gulfion	0	--	1.0E+02	--	--	--	1.0E+02	--	--	--	--	--	--	--	--	--	--	1.0E+02	--	--	--
Heptachlor c	0	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04	5.2E-01	3.8E-03	7.9E-04	7.9E-04
Heptachlor Epoxide c	0	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04	5.2E-01	3.8E-03	3.9E-04	3.9E-04
Hexachlorobenzene c	0	--	--	2.9E-03	2.9E-03	--	--	2.9E-03	2.9E-03	--	--	--	--	--	--	--	--	2.9E-03	2.9E-03	--	--
Hexachlorobutadiene c	0	--	--	4.4E+00	1.8E+02	--	--	4.4E+00	1.8E+02	--	--	--	--	--	--	--	--	4.4E+00	1.8E+02	--	--
Hexachlorocyclohexane	0	--	--	2.6E-02	4.9E-02	--	--	2.6E-02	4.9E-02	--	--	--	--	--	--	--	--	2.6E-02	4.9E-02	--	--
Hexachlorocyclohexane Beta-BHC c	0	--	--	9.1E-02	1.7E-01	--	--	9.1E-02	1.7E-01	--	--	--	--	--	--	--	--	9.1E-02	1.7E-01	--	--
Hexachlorocyclohexane Gamma-BHC c (Lindane)	0	9.5E-01	--	9.8E-01	1.8E+00	9.5E-01	--	9.8E-01	1.8E+00	9.5E-01	--	9.8E-01	1.8E+00	9.5E-01	--	9.8E-01	1.8E+00	9.5E-01	--	9.8E-01	1.8E+00
Hexachlorocyclopentadiene	0	--	--	4.0E+01	1.1E+03	--	--	4.0E+01	1.1E+03	--	--	--	--	--	--	--	--	4.0E+01	1.1E+03	--	--
Hexachloroethane c	0	--	--	1.4E+01	3.3E+01	--	--	1.4E+01	3.3E+01	--	--	--	--	--	--	--	--	1.4E+01	3.3E+01	--	--
Hydrogen Sulfide	0	--	2.0E+00	--	--	--	2.0E+00	--	--	--	2.0E+00	--	--	--	2.0E+00	--	--	2.0E+00	--	--	--
Indeno (1,2,3-cd) pyrene c	0	--	--	3.8E-02	1.8E-01	--	--	3.8E-02	1.8E-01	--	--	--	--	--	--	--	--	3.8E-02	1.8E-01	--	--
Iron	0	--	--	3.0E+02	9.6E+03	--	--	3.0E+02	9.6E+03	--	--	--	--	--	--	--	--	3.0E+02	9.6E+03	--	--
Isophorone c	0	--	--	0.0E+00	--	--	0.0E+00	--	--	--	0.0E+00	--	--	--	0.0E+00	--	--	0.0E+00	--	--	--
Kepone	0	--	0.0E+00	--	--	--	0.0E+00	--	--	--	0.0E+00	--	--	--	0.0E+00	--	--	0.0E+00	--	--	--
Lead	0	4.9E+01	5.6E+00	1.5E+01	--	4.9E+01	5.6E+00	1.5E+01	--	4.9E+01	5.6E+00	1.5E+01	--	4.9E+01	5.6E+00	1.5E+01	--	4.9E+01	5.6E+00	1.5E+01	--
Malathion	0	--	1.0E-01	--	--	--	1.0E-01	--	--	--	1.0E-01	--	--	--	1.0E-01	--	--	1.0E-01	--	--	--
Manganese	0	--	--	5.0E+01	--	--	5.0E+01	--	--	--	5.0E+01	--	--	--	5.0E+01	--	--	5.0E+01	--	--	--
Mercury	0	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--
Methyl Bromide	0	--	--	4.7E+01	1.5E+03	--	--	4.7E+01	1.5E+03	--	--	--	--	--	--	--	--	4.7E+01	1.5E+03	--	--
Methylene Chloride c	0	--	--	4.6E+01	5.9E+03	--	--	4.6E+01	5.9E+03	--	--	--	--	--	--	--	--	4.6E+01	5.9E+03	--	--
Methoxychlor	0	--	3.0E-02	1.0E+02	--	--	3.0E-02	1.0E+02	--	--	--	3.0E-02	1.0E+02	--	--	--	--	3.0E-02	1.0E+02	--	--
Mirex	0	--	0.0E+00	--	--	--	0.0E+00	--	--	--	0.0E+00	--	--	--	0.0E+00	--	--	0.0E+00	--	--	--
Nickel	0	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03	1.0E+02	1.1E+01	6.1E+02	4.6E+03
Nitrate (as N)	0	--	--	1.0E+04	--	--	1.0E+04	--	--	--	1.0E+04	--	--	--	1.0E+04	--	--	1.0E+04	--	--	--
Nitrobenzene	0	--	--	1.7E+01	6.9E+02	--	--	1.7E+01	6.9E+02	--	--	--	--	--	--	--	--	1.7E+01	6.9E+02	--	--
N-Nitrosodimethylamine c	0	--	--	6.9E-03	3.0E+01	--	--	6.9E-03	3.0E+01	--	--	--	--	--	--	--	--	6.9E-03	3.0E+01	--	--
N-Nitrosodiphenylamine c	0	--	--	3.3E+01	6.0E+01	--	--	3.3E+01	6.0E+01	--	--	--	--	--	--	--	--	3.3E+01	6.0E+01	--	--
N-Nitrosodi-n-propylamine c	0	--	--	5.0E-02	5.1E+00	--	--	5.0E-02	5.1E+00	--	--	--	--	--	--	--	--	5.0E-02	5.1E+00	--	--
Nonylphenol	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	--	--
Parathion	0	6.5E-02	1.3E-02	--	--	6.5E-02	1.3E-02	--	--	6.5E-02	1.3E-02	--	--	6.5E-02	1.3E-02	--	--	6.5E-02	1.3E-02	--	--
PCB Total c	0	--	1.4E-02	6.4E-04	6.4E-04	--	1.4E-02	6.4E-04	6.4E-04	--	1.4E-02	6.4E-04	6.4E-04	--	1.4E-02	6.4E-04	6.4E-04	1.4E-02	6.4E-04	6.4E-04	6.4E-04
Pentachlorophenol c	0	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01	7.7E-03	5.9E-03	2.7E+00	3.0E+01
Phenol	0	--	1.0E+04	8.6E+05	--	--	1.0E+04	8.6E+05	--	--	--	1.0E+04	8.6E+05	--	--	--	--	1.0E+04	8.6E+05	--	--
Pyrene	0	--	--	8.3E+02	4.0E+03	--	--	8.3E+02	4.0E+03	--	--	--	8.3E+02	4.0E+03	--	--	--	8.3E+02	4.0E+03	--	--
Radionuclides	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gross Alpha Activity (pCi/L)	0	--	--	1.5E+01	--	--	1.5E+01	--	--	--	1.5E+01	--	--	--	1.5E+01	--	--	1.5E+01	--	--	--
Beta and Proton Activity (mrem/y)	0	--	--	4.0E+00	4.0E+00	--	--	4.0E+00	4.0E+00	--	--	--	4.0E+00	4.0E+00	--	--	--	4.0E+00	4.0E+00	--	--
Radium 226 + 228 (pCi/L)	0	--	--	5.0E+00	--	--	5.0E+00	--	--	--	5.0E+00	--	--	--	5.0E+00	--	--	5.0E+00	--	--	--
Uranium (ug/l)	0	--	--	3.0E+01	--	--	3.0E+01	--	--	--	3.0E+01	--	--	--	3.0E+01	--	--	3.0E+01	--	--	--

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	1.7E+02	4.2E+03	2.0E+01	5.0E+00	1.7E+02	4.2E+03	--	--	--	--	2.0E+01	5.0E+00	1.7E+02	4.2E+03	--	--	--	--
Silver	0	1.0E+00	--	2.5E+05	--	--	--	2.5E+05	--	--	--	--	--	1.0E+00	--	2.5E+05	--	--	--	--	--
Sulfate	0	--	--	1.7E+00	4.0E+01	--	--	1.7E+00	4.0E+01	--	--	--	--	--	--	2.5E+05	--	--	--	--	--
1,1,2,2-Tetrachloroethane ^c	0	--	--	6.9E+00	3.3E+01	--	--	6.9E+00	3.3E+01	--	--	--	--	--	--	1.7E+00	4.0E+01	--	--	--	--
Tetrachloroethylene ^c	0	--	--	2.4E-01	4.7E-01	--	--	2.4E-01	4.7E-01	--	--	--	--	--	--	6.9E+00	3.3E+01	--	--	--	--
Thallium	0	--	--	5.1E+02	6.0E+03	--	--	5.1E+02	6.0E+03	--	--	--	--	--	--	2.4E-01	4.7E-01	--	--	--	--
Toluene	0	--	--	5.0E+05	--	--	--	5.0E+05	--	--	--	--	--	--	--	5.1E+02	6.0E+03	--	--	--	--
Total dissolved solids	0	7.3E-01	2.0E-04	2.8E-03	2.8E-03	7.3E-01	2.0E-04	2.8E-03	2.8E-03	--	--	--	--	7.3E-01	2.0E-04	2.8E-03	2.8E-03	--	--	--	--
Toxaphene ^c	0	4.8E-01	7.2E-02	--	--	4.8E-01	7.2E-02	--	--	--	--	--	--	4.8E-01	7.2E-02	--	--	--	--	--	--
Trihalophenol	0	--	--	3.5E+01	7.0E+01	--	--	3.5E+01	7.0E+01	--	--	--	--	--	--	3.5E+01	7.0E+01	--	--	--	--
1,2,4-Trichlorobenzene	0	--	--	5.9E+00	1.6E+02	--	--	5.9E+00	1.6E+02	--	--	--	--	--	--	3.5E+01	7.0E+01	--	--	--	--
1,1,2-Trichloroethane ^c	0	--	--	2.5E+01	3.0E+02	--	--	2.5E+01	3.0E+02	--	--	--	--	--	--	5.9E+00	1.6E+02	--	--	--	--
Trichloroethylene ^c	0	--	--	1.4E+01	2.4E+01	--	--	1.4E+01	2.4E+01	--	--	--	--	--	--	2.5E+01	3.0E+02	--	--	--	--
2,4,6-Trichlorophenol ^c	0	--	--	5.0E+01	--	--	--	5.0E+01	--	--	--	--	--	--	--	1.4E+01	2.4E+01	--	--	--	--
2-(2,4,5-Trichlorophenoxy) propionic acid (Silver)	0	--	--	2.5E-01	2.4E+01	--	--	2.5E-01	2.4E+01	--	--	--	--	--	--	5.0E+01	--	--	--	--	--
Vinyl Chloride ^c	0	6.5E+01	6.6E+01	7.4E+03	2.6E+04	6.5E+01	6.6E+01	7.4E+03	2.6E+04	--	--	--	--	6.5E+01	6.6E+01	7.4E+03	2.6E+04	--	--	--	--
Zinc	0	--	--	5.0E+01	--	--	--	5.0E+01	--	--	--	--	--	--	--	2.5E-01	2.4E+01	--	--	--	--

Notes:

- All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 2C maximum for industries and design flow for Municipal
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
- Antidegradation WLAs are based upon a complete mix:
Antidegradation WLA = (0.25(WQC - background conc.) + background conc.) for acute and chronic
= (0.1(WQC - background conc.) + background conc.) for human health
- WLAs established at the following stream flows: 1Q10 for Acute, 3Q010 for Chronic Harmonia, 7Q10 for Other Chronic, 3Q05 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	5.6E+00
Arsenic	1.0E+01
Barium	2.0E+03
Cadmium	3.9E-01
Chromium III	2.5E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	3.0E+02
Lead	3.4E+00
Manganese	5.0E+01
Mercury	4.6E-01
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

Note: do not use Q.L.'s lower than the minimum Q.L.'s provided in agency guidance

6/15/2010 10:24:26 AM

Facility = Rocky Pen Run WTF

Chemical = Chlorine

Chronic averaging period = 4

WLAa = 0.019 mg/l

WLAc = 0.011 mg/l

Q.L. = 0.10 mg/l

samples/mo. = 1

samples/wk. = 1

Summary of Statistics:

observations = 1

Expected Value = .2

Variance = .0144

C.V. = 0.6

97th percentile daily values = .486683

97th percentile 4 day average = .332758

97th percentile 30 day average = .241210

< Q.L. = 0

Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity

Maximum Daily Limit = 1.60883226245855E-02

Average Weekly limit = 1.60883226245855E-02

Average Monthly Limit = 1.60883226245855E-02

The data are:

0.2 mg/l

Spreadsheet for determination of WET test endpoints or WET limits

Excel 97
 Revision Date: 01/10/05
 File: WETLIM10.xls
 (MIX EXE required also)

Acute Endpoint/Permit Limit	Use as LC50 in Special Condition, as TUA on DMR	Use as NOEC in Special Condition, as TUC on DMR
ACUTE 180% = NOAEC	LC50 = NA % Use as NA TUA	NOEC = 69 % Use as 1.44 TUC
ACUTE WLA _s 0.3	Note: Inform the permittee that if the mean of the data exceeds this TUA: 1.0	NOEC = 34 % Use as 2.94 TUC
Note: Inform the permittee that if the mean of the data exceeds this TUC: a limit may result using WLA EXE		
Chronic Endpoint/Permit Limit		
CHRONIC 1.462574684 TUC	NOEC = 69 % Use as 1.44 TUC	
BOTH* 3.000000074 TUC	NOEC = 34 % Use as 2.94 TUC	
AML 1.462574684 TUC	NOEC = 69 % Use as 1.44 TUC	
ACUTE WLA _s c	3	Note: Inform the permittee that if the mean of the data exceeds this TUC: a limit may result using WLA EXE
CHRONIC WLA _s	1	1.0
<small>Both means acute expressed as chronic</small>		

Enter data in the cells with blue type:	% Flow to be used from MIX EXE	Diluter/Modeling study?
Entry Date: 05/25/10	100 %	Enter Y/N
Facility Name: Rocky Pen Run WTP	100 %	Acute
VPDES Number: Issuance	100 %	Chronic
Outfall Number: 1		
Plant Flow: 0.6 MGD		
Acute (Q10): 0 MGD		
Chronic (Q10): 0 MGD		
Are data available to calculate CV? (Y/N)	N	Go to Page 2
Are data available to calculate ACR? (Y/N)	N	(NOEC < LC50, do not use greater/less than data) Go to Page 3

NOTE: If the IWCa is >33%, specify the NOAEC = 100% test endpoint for use

IWCa	100 %	Plant flow/plant flow + 1Q10	100 %	Plant flow/plant flow + 7Q10
IWCc	100 %	100/IWCa		
Dilution, acute	1	100/IWCa		
Dilution, chronic	1	100/IWCa		
WLA _s		0.3 Instream criterion (0.3 TUA) X's Dilution, acute		
WLA _s		1 Instream criterion (1.0 TUC) X's Dilution, chronic		
WLA _s		3 ACR X's WLA _s - converts acute WLA to chronic units		
ACR - acute/chronic ratio		10 LC50/NOEC (Default is 10 - if data are available, use tables Page 3)		
CV - Coefficient of variation	0.6	Default of 0.6 - if data are available, use tables Page 2)		
Constants	ea	0.4109447 Default = 0.41		
	eb	0.6016373 Default = 0.60		
	ec	2.4334175 Default = 2.43		
	ed	2.4334175 Default = 2.43 (1 samp) No. of samples: 1		
LTA _s	1.2328341	WLA _s c X's ea		
LTA _s	0.6010373	WLA _s c X's eb		
MDL** with LTA _s	3.000000074	NOEC = 33.333333 (Protects from acute/chronic toxicity)		
MDL** with LTA _s	1.462574684	NOEC = 68.372577 (Protects from chronic toxicity)		
AML with lowest LTA	1.462574684	NOEC = 68.372577 Lowest LTA X's ed		
**The Maximum Daily Limit is calculated from the lowest LTA, X's ac. The LTA _s c and MDL using it are driven by the ACR.				
IF ONLY ACUTE ENDPOINT/LIMIT IS NEEDED, CONVERT MDL FROM TUC TO TUA.				
MDL with LTA _s c	0.3000000007	TUC	LC50 = 333.333325 %	Use NOAEC=100%
MDL with LTA _s	0.146257468	TUC	LC50 = 683.725769 %	Use NOAEC=100%
				Rounded LC50's
				LC50 = NA %
				LC50 = NA %

Page 3 - Follow directions to develop a site specific ACR (Acute to Chronic Ratio)

To determine Acute/Chronic Ratio (ACR), insert usable data below. Usable data is defined as valid paired test results, acute and chronic, tested at the same temperature, same species. The chronic NOEC must be less than the acute LC50, since the ACR divides the LC50 by the NOEC. LC50's >100% should not be used.

Table 1. ACR using Veribrate data

Set #	LC50	NOEC	Test ACR	Logarithm	Geomean	Antilog ACR to Use
1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

ACR for veribrate data:
0

Table 1. Result:
Veribrate ACR
Lowest ACR

0
Default to 10

Table 2. ACR using Invertebrate data

Set #	LC50	NOEC	Test ACR	Logarithm	Geomean	Antilog ACR to Use
1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

ACR for veribrate data:
0

Table 3. Convert LC50's and NOEC's to Chronic TU's for use in WLAEXE
ACR used: 10

Enter LC50	TUe	Enter NOEC	TUe
1	NO DATA	NO DATA	NO DATA
2	NO DATA	NO DATA	NO DATA
3	NO DATA	NO DATA	NO DATA
4	NO DATA	NO DATA	NO DATA
5	NO DATA	NO DATA	NO DATA
6	NO DATA	NO DATA	NO DATA
7	NO DATA	NO DATA	NO DATA
8	NO DATA	NO DATA	NO DATA
9	NO DATA	NO DATA	NO DATA
10	NO DATA	NO DATA	NO DATA
11	NO DATA	NO DATA	NO DATA
12	NO DATA	NO DATA	NO DATA
13	NO DATA	NO DATA	NO DATA
14	NO DATA	NO DATA	NO DATA
15	NO DATA	NO DATA	NO DATA
16	NO DATA	NO DATA	NO DATA
17	NO DATA	NO DATA	NO DATA
18	NO DATA	NO DATA	NO DATA
19	NO DATA	NO DATA	NO DATA
20	NO DATA	NO DATA	NO DATA

If WLA EXE determines that an acute limit is needed, you need to convert the TUe answer you get to TUa and then an LC50, enter it here:
NO DATA %LC50 TUa

Table 4. DILUTION SERIES TO RECOMMEND

Monitoring % Effluent	TUe	Limit % Effluent	TUe
100.0	1.00	100.0	1.00
50.0	2.00	83.1	1.20
25.0	4.00	69.0	1.45
12.5	8.00	57.3	1.74
6.25	16.00	47.6	2.10
3.12	32.05	39.5	2.53
1.56	64.10	32.9	3.04

Dilution series based on data mean
Dilution series to use for limit:
Dilution factor to recommend: 0.5
0.8306624 1.4492754
Dilution series to recommend:
Extra dilutions if needed

Call: J9

Comment: This is assuming that the data are Type 2 data (none of the data in the data set are censored - "< or ">").

Call: K18

Comment: This is assuming that the data are Type 2 data (none of the data in the data set are censored - "< or ">").

Call: J22

Comment: Remember to change the "N" to "Y" if you have ratios entered, otherwise, they won't be used in the calculations.

Call: C40

Comment: If you have entered data to calculate an ACR on page 3, and this is still defaulted to "10", make sure you have selected "Y" in call E21

Call: C41

Comment: If you have entered data to calculate an effluent specific CV on page 2, and this is still defaulted to "0.5", make sure you have selected "Y" in call E20

Call: L48

Comment: See Row 151 for the appropriate dilution series to use for these NOEC's

Call: G82

Comment:

Vertebrates are:
Pimphales promelas
Oncorhynchus mykiss
Cyprinodon variegatus

Call: J82

Comment:

Invertebrates are:
Ceriodaphnia dubia
Mysidopsis bahia

Call: C117

Comment: Vertebrates are:

Pimphales promelas
Cyprinodon variegatus

Call: M119

Comment: The ACR has been picked up from cell C34 on Page 1. If you have paired data to calculate an ACR, enter it in the tables to the left, and make sure you have a "Y" in call E21 on Page 1. Otherwise, the default of 10 will be used to convert your acute data.

Call: M121

Comment: If you are only concerned with acute data, you can enter it in the NOEC column for conversion and the number calculated will be equivalent to the TUA. The calculation is the same. $100\text{NOEC} = \text{TUC}$ or $100\text{LC50} = \text{TUA}$.

Call: C138

Comment: Invertebrates are:

Ceriodaphnia dubia
Mysidopsis bahia

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated industrial wastewater into a water body in Stafford County, Virginia.

PUBLIC COMMENT PERIOD: September 2, 2010 to 5:00 p.m. on October 1, 2010

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Industrial wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Stafford County Board of Supervisors, P.O. Box 339, Stafford, VA 22555, VA0092568

NAME AND ADDRESS OF FACILITY: Rocky Pen Run Water Treatment Facility, 500 Greenbank Road, Fredericksburg, VA 22406

PROJECT DESCRIPTION: The Stafford County Board of Supervisors has applied for a new permit for the public Rocky Pen Run Water Treatment Facility. The applicant proposes to release treated industrial wastewaters at a rate of 0.414 million gallons per day into a water body. Industrial solids will be processed and then transported to the Rappahannock Regional Solid Waste Management Board Landfill for disposal. The facility proposes to release the treated industrial wastewaters in the Rocky Pen Run in Stafford County in the Rappahannock River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, Chlorine, and Total Suspended Solids.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.

Name: Susan Mackert

Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193

Phone: (703) 583-3853 E-mail: susan.mackert@deq.virginia.gov Fax: (703) 583-3821

**State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review**

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Rocky Pen Run Water Treatment Facility
 NPDES Permit Number: VA0092568
 Permit Writer Name: Susan Mackert
 Date: June 15, 2010

Major [] Minor [x] Industrial [x] Municipal []

I.A. Draft Permit Package Submittal Includes:

	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?	X		

I.B. Permit/Facility Characteristics

	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?	X		
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?			X
5. Has there been any change in streamflow characteristics since the last permit was developed?			X
6. Does the permit allow the discharge of new or increased loadings of any pollutants?			X
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?		X	
a. Has a TMDL been developed and approved by EPA for the impaired water?			X
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?			X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?			X
10. Does the permit authorize discharges of storm water?	X		

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?			X
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?			X

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

II.A. Permit Cover Page/Administration

	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements

	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)

	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			X
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?	X		
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production” for the facility (not design)?			X
5. Does the permit contain “tiered” limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?	X		
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits

	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?		X	

II.D. Water Quality-Based Effluent Limits – cont.	Yes	No	N/A
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?	X		
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?	X		
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements

	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			X
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State’s standard practices?	X		

II.F. Special Conditions

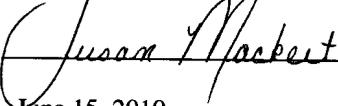
	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?		X	
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			X
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?		X	
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			X

II.G. Standard Conditions

	Yes	No	N/A																								
1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X																										
<p>List of Standard Conditions – 40 CFR 122.41</p> <table border="0"> <tr> <td>Duty to comply</td> <td>Property rights</td> <td>Reporting Requirements</td> </tr> <tr> <td>Duty to reapply</td> <td>Duty to provide information</td> <td>Planned change</td> </tr> <tr> <td>Need to halt or reduce activity not a defense</td> <td>Inspections and entry</td> <td>Anticipated noncompliance</td> </tr> <tr> <td>Duty to mitigate</td> <td>Monitoring and records</td> <td>Transfers</td> </tr> <tr> <td>Proper O & M</td> <td>Signatory requirement</td> <td>Monitoring reports</td> </tr> <tr> <td>Permit actions</td> <td>Bypass</td> <td>Compliance schedules</td> </tr> <tr> <td></td> <td>Upset</td> <td>24-Hour reporting</td> </tr> <tr> <td></td> <td></td> <td>Other non-compliance</td> </tr> </table>				Duty to comply	Property rights	Reporting Requirements	Duty to reapply	Duty to provide information	Planned change	Need to halt or reduce activity not a defense	Inspections and entry	Anticipated noncompliance	Duty to mitigate	Monitoring and records	Transfers	Proper O & M	Signatory requirement	Monitoring reports	Permit actions	Bypass	Compliance schedules		Upset	24-Hour reporting			Other non-compliance
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		Other non-compliance																									
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X																										

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	<u>Susan Mackert</u>
Title	<u>Environmental Specialist II Senior</u>
Signature	<u></u>
Date	<u>June 15, 2010</u>